



General Assembly

February Session, 2016

***Raised Bill No. 5510***

LCO No. 2022



Referred to Committee on ENERGY AND TECHNOLOGY

Introduced by:  
(ET)

***AN ACT CONCERNING ELECTRIC, ZERO EMISSION AND FUEL CELL  
ELECTRIC VEHICLES.***

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. (NEW) (*Effective July 1, 2016*) As used in this section,  
2 sections 14-12, 16a-3e and 43-3a of the general statutes, as amended by  
3 this act, and sections 5 and 8 of this act:

4 (1) "Battery electric vehicle" means any vehicle that operates solely  
5 by use of a battery or battery pack, or that is powered primarily  
6 through the use of an electric battery or battery pack and uses a  
7 flywheel or capacitor that stores energy produced by an electric motor  
8 or through regenerative braking to assist in vehicle operation;

9 (2) "Electric vehicle" means any battery electric vehicle, fuel cell  
10 electric vehicle, hybrid electric vehicle or range-extended battery  
11 electric vehicle;

12 (3) "Fuel cell electric vehicle" means any vehicle that operates solely  
13 by use of a fuel cell, as defined in subparagraph (B)(i) of subdivision

14 (113) of section 12-412 of the general statutes;

15 (4) "Hybrid electric vehicle" means a motor vehicle that allows  
16 power to be delivered to the driver wheels solely by a battery-powered  
17 electric motor that also incorporates the use of a combustion engine to  
18 provide power to the battery, or any vehicle that allows power to be  
19 delivered to the driver wheels by either a combustion engine or by a  
20 battery-powered electric motor, or both;

21 (5) "Plug-in hybrid electric vehicle" means a hybrid electric vehicle  
22 that has the capability to charge the battery or batteries used for  
23 vehicle propulsion from an off-vehicle electric source, such that the off-  
24 vehicle source cannot be connected to the vehicle while the vehicle is in  
25 motion.

26 (6) "Range-extended battery electric vehicle" means a vehicle (A)  
27 powered predominantly by a zero-emission energy storage device, (B)  
28 with a manufacturer rating of more than seventy-five all-electric miles,  
29 and (C) equipped with a backup auxiliary power unit that does not  
30 operate until the energy storage device is fully depleted; and

31 (7) "Zero-emission vehicle" means any battery electric vehicle, fuel  
32 cell electric vehicle, hybrid electric vehicle or range-extended battery  
33 electric vehicle, and any vehicle that meets the requirements pursuant  
34 to section 22a-174-36 of the regulations of Connecticut state agencies.

35 Sec. 2. Section 14-12 of the general statutes is amended by adding  
36 subsection (l) as follows (*Effective July 1, 2016*):

37 (NEW) (l) Not later than October 1, 2016, the Department of Motor  
38 Vehicles shall record the number of electric vehicles, as defined in  
39 section 1 of this act, registered in the state. This data shall be publicly  
40 available on the department's Internet web site and shall include (1)  
41 the number of electric vehicles registered in the state each year; and (2)  
42 the total number of electric vehicles registered in the state. The  
43 department shall update this information every six months.

44       Sec. 3. Section 16-1 of the 2016 supplement to the general statutes is  
45       amended by adding subsection (c) as follows (*Effective July 1, 2016*):

46       (NEW) (c) The terms "utility", "public utility" and "public service  
47       company" shall not be deemed to include public or private electric  
48       vehicle charging stations, as defined in section 16-19f, as amended by  
49       this act.

50       Sec. 4. Section 16-19f of the general statutes is repealed and the  
51       following is substituted in lieu thereof (*Effective July 1, 2016*):

52       (a) As used in this section:

53       (1) "Cost of service" means an electric utility rate for a class of  
54       consumer which is designed, to the maximum extent practicable, to  
55       reflect the cost to the utility in providing electric service to such class;

56       (2) "Declining block rate" means an electric utility rate for a class of  
57       consumer which prices successive blocks of electricity consumed by  
58       such consumer at lower per-unit prices;

59       (3) "Time of day rate" means an electric utility rate for a class of  
60       consumer which is designed to reflect the cost to the utility of  
61       providing electricity to such consumer at different times of the day;

62       (4) "Seasonal rate" means an electric utility rate for a class of  
63       consumer designed to reflect the cost to the utility in providing  
64       electricity to such consumer during different seasons of the year;

65       (5) "Electric vehicle time of day rate" means an electric utility rate  
66       for a class of consumer designed to reflect the cost to the utility of  
67       providing electricity to such consumer charging an electric vehicle at a  
68       public or private electric vehicle charging station at different times of  
69       the day, but shall not include demand charges;

70       (6) "Public electric vehicle charging station" means an electric  
71       vehicle charging station, electric recharging point, charging point or

72 electric vehicle supply equipment [, which] that (A) is an element in an  
73 infrastructure that supplies electricity for the recharging of plug-in  
74 electric vehicles, including all-electric cars [, neighborhood electric  
75 vehicles] and plug-in hybrids, and [which] (B) allows any electric  
76 vehicle owner or operator to access and use the charging station free of  
77 charge;

78 (7) "Private electric vehicle charging station" means an electric  
79 vehicle charging station, electric recharging point, charging point or  
80 electric vehicle supply equipment that (A) is an element in an  
81 infrastructure that supplies electricity for the recharging of plug-in  
82 electric vehicles, including all-electric cars and plug-in hybrids, and (B)  
83 that may allow any electric vehicle owner or operator to access and use  
84 the charging station;

85 [(7)] (8) "Interruptible rate" means an electric utility rate designed to  
86 reflect the cost to the utility in providing service to a consumer where  
87 such consumer permits his service to be interrupted during periods of  
88 peak electrical demand; and

89 [(8)] (9) "Load management techniques" means cost-effective  
90 techniques used by an electric utility to reduce the maximum kilowatt  
91 demand on the utility.

92 (b) The Public Utilities Regulatory Authority, with respect to each  
93 electric public service company and each municipal electric company,  
94 shall (1) within two years, consider and determine whether it is  
95 appropriate to implement any of the following rate design standards:  
96 (A) Cost of service; (B) prohibition of declining block rates; (C) time of  
97 day rates; (D) seasonal rates; (E) interruptible rates; and (F) load  
98 management techniques, and (2) [within one year, consider and  
99 determine whether it is appropriate to] not later than June 1, 2017,  
100 implement electric vehicle time of day rates for (A) public electric  
101 vehicle charging stations; and (B) private electric vehicle charging  
102 stations. The consideration of said standards by the authority and each

103 municipal electric company shall be made after public notice and  
104 hearing. Such hearing may be held concurrently with a hearing  
105 required pursuant to subsection (b) of section 16-19e. The authority  
106 and each municipal company shall make a determination on whether  
107 it is appropriate to implement any of said standards. Said  
108 determination shall be in writing, shall take into consideration the  
109 evidence presented at the hearing and shall be available to the public.  
110 A standard shall be deemed to be appropriate for implementation if  
111 such implementation would encourage energy conservation, optimal  
112 and efficient use of facilities and resources by an electric public service  
113 company or municipal electric company and equitable rates for electric  
114 consumers.

115 (c) The Public Utilities Regulatory Authority, with respect to each  
116 electric public service company, and each municipal electric company  
117 may implement any standard determined under subsection (b) of this  
118 section to be appropriate or decline to implement any such standard. If  
119 the authority or a municipal electric company declines to implement  
120 any standard determined to be appropriate, it shall state in writing its  
121 reasons for doing so and make such statement available to the public.

122 (d) The provisions of this section shall not apply to any municipal  
123 electric company which has total annual sales of electricity for  
124 purposes other than resale of five hundred million kilowatt-hours or  
125 less.

126 Sec. 5. (NEW) (*Effective July 1, 2016*) (a) The Public Utilities  
127 Regulatory Authority shall require each electric distribution company,  
128 as defined in section 16-1 of the general statutes, as amended by this  
129 act, to integrate electric vehicle charging load projections into such  
130 company's distribution planning. Such projections shall be based on  
131 the number of electric vehicles, as defined in section 1 of this act,  
132 registered in the state and projected increases or decreases in sales of  
133 such vehicles.

134 (b) Not later than January 1, 2017, and annually thereafter, each  
135 electric distribution company shall publish on such company's Internet  
136 web site a report explaining the incorporation of such company's  
137 electric vehicle charging load projections for the company's  
138 distribution planning.

139 Sec. 6. Section 16a-3e of the general statutes is repealed and the  
140 following is substituted in lieu thereof (*Effective July 1, 2016*):

141 The Integrated Resources Plan to be adopted in 2012 and biennially  
142 thereafter, shall (1) indicate specific options to reduce electric rates and  
143 costs. Such options may include the procurement of new sources of  
144 generation. In the review of new sources of generation, the Integrated  
145 Resources Plan shall indicate whether the private wholesale market  
146 can supply such additional sources or whether state financial  
147 assistance, long-term purchasing of electricity contracts or other  
148 interventions are needed to achieve the goal; (2) analyze in-state  
149 renewable sources of electricity in comparison to transmission line  
150 upgrades or new projects and out-of-state renewable energy sources,  
151 provided such analysis also considers the benefits of additional jobs  
152 and other economic impacts and how they are created and subsidized;  
153 (3) include an examination of average consumption and other states'  
154 best practices to determine why electricity rates are lower elsewhere in  
155 the region; (4) assess and compare the cost of transmission line  
156 projects, new power sources, renewable sources of electricity,  
157 conservation and distributed generation projects to ensure the state  
158 pursues only the least-cost alternative projects; (5) analyze the  
159 potential for electric vehicles, as defined in section 1 of this act, to  
160 provide energy storage and other services to the electric grid and  
161 identify strategies to ensure that the grid is prepared to support  
162 increased electric vehicle charging, based on projections of sales of  
163 electric vehicles; (6) continually monitor supply and distribution  
164 systems to identify potential need for transmission line projects early  
165 enough to identify alternatives; and [(6)] (7) assess the least-cost  
166 alternative to address reliability concerns, including, but not limited to,

167 lowering electricity demand through conservation and distributed  
168 generation projects before an electric distribution company submits a  
169 proposal for transmission lines or transmission line upgrades to the  
170 independent system operator or the Federal Energy Regulatory  
171 Commission, provided no provision of such plan shall be deemed to  
172 prohibit an electric distribution company from making any filing  
173 required by law or regulation.

174 Sec. 7. Subsection (a) of section 16a-15 of the general statutes is  
175 repealed and the following is substituted in lieu thereof (*Effective July*  
176 *1, 2016*):

177 (a) Each person shall publicly display and maintain on each pump  
178 or other dispensing device from which any gasoline or other product  
179 intended as a fuel for aircraft, motor boats or motor vehicles, including  
180 electricity dispensed from electric vehicle charging equipment and  
181 hydrogen fuel, is sold by such person, such signs as the Commissioner  
182 of Consumer Protection, by regulation adopted pursuant to chapter 54,  
183 may require to inform the public of the octane rating and price of such  
184 gasoline, and the price of such electricity, hydrogen fuel or other  
185 product. Each person selling such gasoline, electricity, hydrogen fuel  
186 or other product on both a full-serve and self-serve basis and  
187 displaying the price of such gasoline, electricity, hydrogen fuel or  
188 other product at a location on the premises other than at a pump or  
189 other dispensing device shall include in such display both the full-  
190 serve and self-serve prices of such gasoline, electricity, hydrogen fuel  
191 or other product, in such manner as the commissioner, by regulation,  
192 may require. [All] For gasoline or any other product intended as a fuel,  
193 including hydrogen fuel, all signs as to price shall be the per-gallon  
194 price and shall not be the price of less or more than one gallon. For  
195 electricity dispensed from electric vehicle charging equipment, all  
196 signs as to price shall be the per-kilowatt hour price.

197 Sec. 8. (NEW) (*Effective July 1, 2016*) (a) The owner or operator of a  
198 private electric vehicle charging station, as defined in section 16-19f of

199 the general statutes, as amended by this act, that is available for public  
200 use shall provide multiple payment options, including, but not limited  
201 to, cash or electronic payment by means of a credit card or debit card.

202 (b) The Commissioner of Motor Vehicles shall disclose the location  
203 and characteristics of each private electric vehicle charging station,  
204 including, but not limited to, the address, voltage and timing  
205 restrictions, to the federal database operated by the United States  
206 Department of Energy Alternative Fuels Data Center.

207 (c) No person shall park in a space equipped with a private electric  
208 vehicle charging station, unless such person is operating a plug-in  
209 hybrid electric vehicle or battery electric vehicle, as defined in section 1  
210 of this act.

211 (d) The owner or operator of a private electric vehicle charging  
212 station that is available for public use may impose restrictions on the  
213 amount of time that an electric vehicle may be charged at the charging  
214 station.

215 (e) No person may own or operate a membership-only electric  
216 vehicle charging station.

217 Sec. 9. Subsection (b) of section 43-3 of the general statutes is  
218 repealed and the following is substituted in lieu thereof (*Effective July*  
219 *1, 2016*):

220 (b) Notwithstanding any regulations to the contrary, the following  
221 weighing and measuring devices shall be registered annually with the  
222 commissioner and the commissioner shall charge the following annual  
223 registration fees: (1) Each motor fuel dispenser and private electric  
224 vehicle charging station, as defined in section 16-19f, as amended by  
225 this act, fifty dollars; (2) each large weighing or measuring device, two  
226 hundred fifty dollars; (3) each medium weighing or measuring device,  
227 one hundred dollars; and (4) each small weighing or measuring device,  
228 thirty dollars.



229       Sec. 10. Section 43-42 of the general statutes is repealed and the  
230       following is substituted in lieu thereof (*Effective July 1, 2016*):

231       The Commissioner of Weights and Measures is authorized after a  
232       public hearing held to establish and promulgate such rules,  
233       regulations, specifications and tolerances to supplement and give full  
234       effect to the provisions of sections 43-36 to 43-44, inclusive, as he  
235       deems necessary. The commissioner [may] shall issue as regulations  
236       those specifications, tolerances and regulations for commercial  
237       weighing and measuring devices adopted by the National Conference  
238       on Weights and Measures set forth in the National Institute of  
239       Standards and Technology Handbook 44, as amended, of the United  
240       States Department of Commerce and incorporate them by reference.  
241       Such rules, regulations, specifications and tolerances shall have the  
242       force and effect of law. In addition to any provisions adopted by the  
243       National Conference on Weights and Measures, the commissioner  
244       shall not require any person to acquire a weighing or measuring device  
245       or instrument that exceeds the weighing or measuring needs of the  
246       business in which such device or instrument is employed.

247       Sec. 11. Section 43-3a of the general statutes is repealed and the  
248       following is substituted in lieu thereof (*Effective July 1, 2016*):

249       (a) The Commissioner of Weights and Measures [may] shall issue as  
250       regulations those specifications, tolerances and regulations for the  
251       method of sale of commodities adopted by the National Conference on  
252       Weights and Measures set forth in the National Institute of Standards  
253       and Technology Handbook 130, as amended, of the United States  
254       Department of Commerce, and incorporate them by reference. Such  
255       rules, regulations, specifications and tolerances shall have the force  
256       and effect of law.

257       (b) Not later than June 1, 2017, the Commissioner of Weights and  
258       Measures shall adopt regulations, in accordance with chapter 54, to  
259       establish standards from the National Institute of Standards and

260 Technology concerning commercial electricity measuring devices,  
 261 including those used to measure and sell electricity dispensed as a fuel  
 262 for electric vehicles, as defined in section 1 of this act.

263       Sec. 12. Subsection (a) of section 14-103d of the general statutes is  
 264 repealed and the following is substituted in lieu thereof (*Effective July*  
 265 *1, 2016*):

266       (a) No motor vehicle which uses any pressurized gas except natural  
 267 gas or hydrogen as a fuel for its engine may enter or be parked in any  
 268 area that is under grade level. Any vehicle within the state which  
 269 carries any pressurized gas as its fuel in a tank attached to the vehicle  
 270 in any concealed area, including, but not limited to, trunks,  
 271 compartments or under such vehicle, except a vehicle that is in  
 272 compliance with all applicable federal codes and standards for light  
 273 duty passenger use, shall have displayed on its exterior the words  
 274 "Pressurized Flammable Gas" or a standard abbreviation or symbol as  
 275 determined by the Office of the State Fire Marshal, in block letters at  
 276 least two inches high, which letters shall be of contrasting colors and  
 277 shall be placed as near as possible to the area where the tank is located.  
 278 No person may dispense any pressurized gas used as a vehicle fuel  
 279 into any tank in a concealed area of a vehicle unless the vehicle is in  
 280 compliance with the requirements of this subsection. The  
 281 Commissioner of Motor Vehicles shall adopt regulations in accordance  
 282 with the provisions of chapter 54 to carry out the provisions of this  
 283 section.

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>July 1, 2016</i>	New section
Sec. 2	<i>July 1, 2016</i>	14-12
Sec. 3	<i>July 1, 2016</i>	16-1
Sec. 4	<i>July 1, 2016</i>	16-19f
Sec. 5	<i>July 1, 2016</i>	New section
Sec. 6	<i>July 1, 2016</i>	16a-3e

Sec. 7	<i>July 1, 2016</i>	16a-15(a)
Sec. 8	<i>July 1, 2016</i>	New section
Sec. 9	<i>July 1, 2016</i>	43-3(b)
Sec. 10	<i>July 1, 2016</i>	43-42
Sec. 11	<i>July 1, 2016</i>	43-3a
Sec. 12	<i>July 1, 2016</i>	14-103d(a)

***Statement of Purpose:***

To prepare electric distribution companies, municipalities, public and private merchants and electrical contractors for the presence and operation of electric, zero-emission and fuel cell vehicles in the state, to make changes regarding parking of hydrogen fuel vehicles under grade level and to make changes regarding labeling of vehicles that carry pressurized gas as fuel.

*[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]*